



PROBLEM SUMMARY

Sample Rating Trend

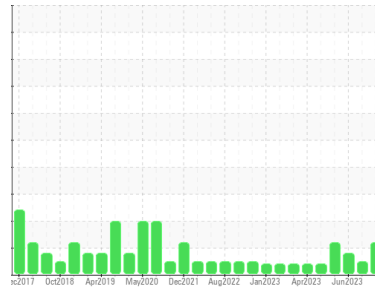
FUEL



Machine Id
10809

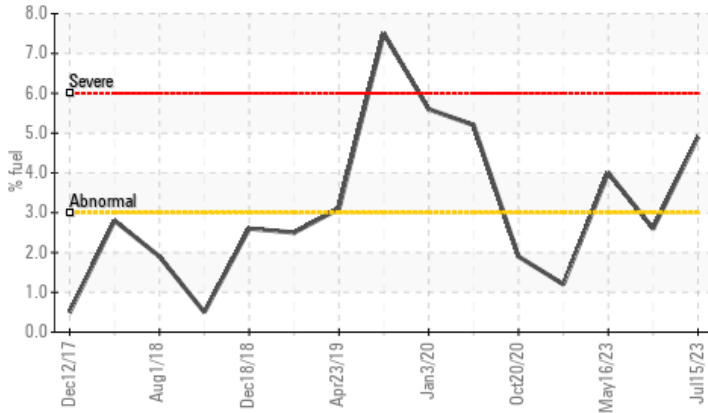
Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (7 GAL)

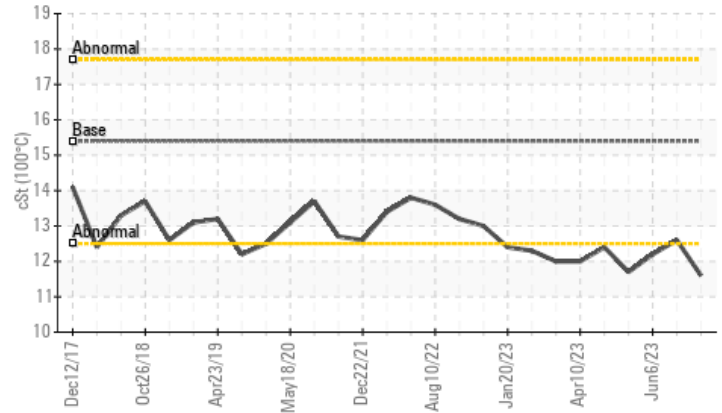


COMPONENT CONDITION SUMMARY

Fuel Dilution



Viscosity @ 100°C



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	MARGINAL
Fuel	%	ASTM D3524	>3.0	▲ 4.9	<1.0	▲ 2.6
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.6	12.6	12.2

Customer Id: GFL010
Sample No.: GFL0086156
Lab Number: 05901043
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

23 Jun 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



06 Jun 2023 Diag: Wes Davis

FUEL



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



16 May 2023 Diag: Wes Davis

FUEL



Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

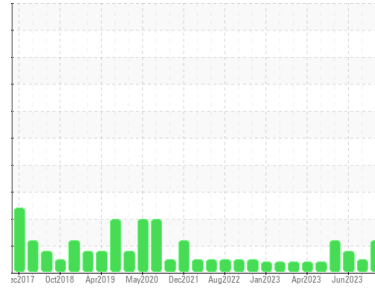
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
10809

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (7 GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0086156	GFL0086069	GFL0083273
Sample Date	Client Info	15 Jul 2023	23 Jun 2023	06 Jun 2023
Machine Age	hrs	18392	18251	18100
Oil Age	hrs	744	603	452
Oil Changed	Client Info	Not Chngd	Not Chngd	Changed
Sample Status		ABNORMAL	NORMAL	MARGINAL

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >75	11	8	24
Chromium	ppm	ASTM D5185m >5	<1	<1	0
Nickel	ppm	ASTM D5185m >4	0	<1	0
Titanium	ppm	ASTM D5185m >2	0	<1	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >15	2	2	<1
Lead	ppm	ASTM D5185m >25	0	0	<1
Copper	ppm	ASTM D5185m >100	<1	<1	1
Tin	ppm	ASTM D5185m >4	0	<1	0
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	21	13
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	56	57	61
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 1010	757	784	764
Calcium	ppm	ASTM D5185m 1070	1030	1065	1132
Phosphorus	ppm	ASTM D5185m 1150	887	917	903
Zinc	ppm	ASTM D5185m 1270	1100	1151	1166
Sulfur	ppm	ASTM D5185m 2060	3259	3499	3287

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	5	4	8
Sodium	ppm	ASTM D5185m	15	11	59
Potassium	ppm	ASTM D5185m >20	2	1	3
Fuel	%	ASTM D3524 >3.0	▲ 4.9	<1.0	▲ 2.6

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >6	0.2	0.2	0.3
Nitration	Abs/cm	*ASTM D7624 >20	8.2	5.9	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.0	17.4	18.9

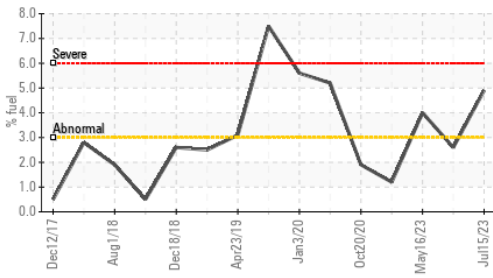
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.2	13.3	14.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	7.1	7.4	7.0

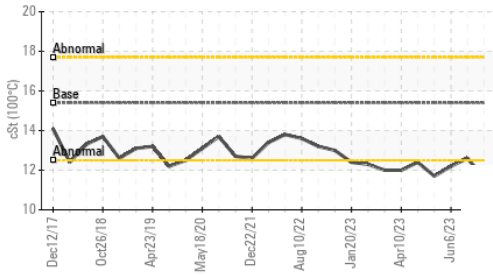


OIL ANALYSIS REPORT

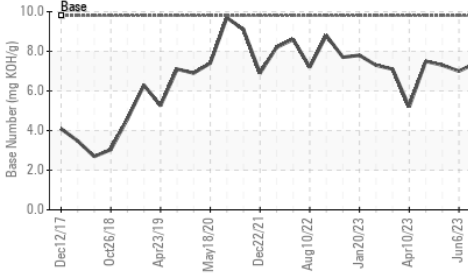
Fuel Dilution



Viscosity @ 100°C



Base Number

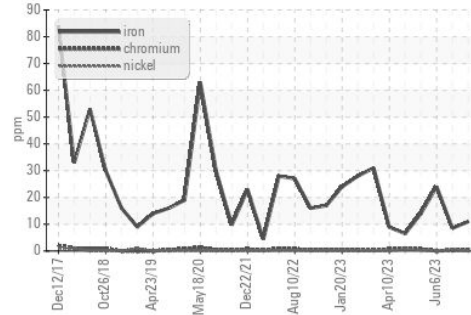


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

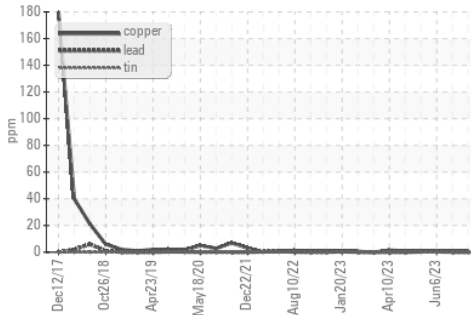
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	▲ 11.6	12.6	12.2

GRAPHS

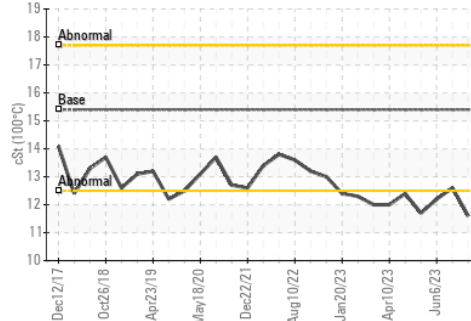
Ferrous Alloys



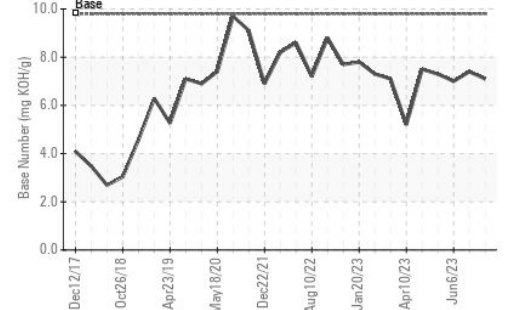
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0086156 Received : 18 Jul 2023
 Lab Number : 05901043 Diagnosed : 19 Jul 2023
 Unique Number : 10562399 Diagnostician : Wes Davis
 Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 010 - Stockbridge
 1280 Rum Creek Parkway
 Stockbridge, GA
 US 30281
 Contact: JOSHUA TINKER
 joshuatinker@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: